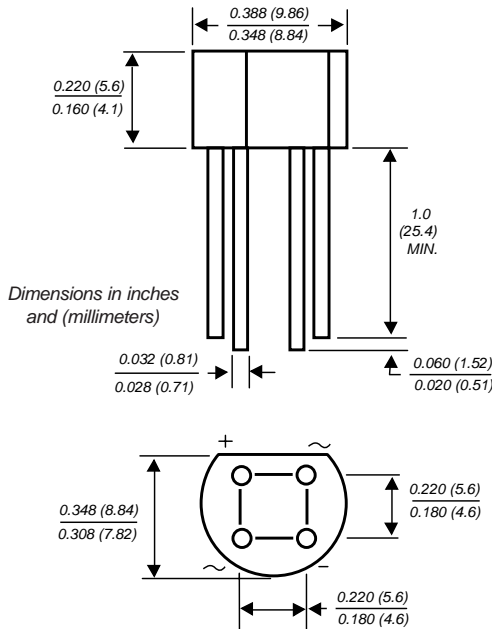




Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 65 and 600V
Forward Current 1.0A

Case Style WOG



Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High case dielectric strength
- Typical I_R less than $0.1\mu A$
- High overload surge current
- Ideal for printed circuit boards
- High temperature soldering guaranteed: $260^\circ C/10$ seconds, $0.375"$ (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

- Case:** Molded plastic body over passivated junctions
- Terminals:** Plated leads solderable per MIL-STD-750, Method 2026
- Mounting Position:** Any
- Weight:** 0.04 oz., 1.1 g
- Packaging codes/options:** 1/100 EA. per Bulk Bag

Maximum Ratings & Thermal Characteristics Ratings at $25^\circ C$ ambient temperature unless otherwise specified.

| Parameter | Symbols | B40 | B80 | B125 | B250 | B380 | Units |
|---|------------------------------------|-------------|--------|--------|--------|--------|--------------------|
| | | C1000G | C1000G | C1000G | C1000G | C1000G | |
| Maximum repetitive peak reverse voltage | V_{RRM} | 65 | 125 | 200 | 400 | 600 | V |
| Maximum RMS input voltage R + C-load | V_{RMS} | 40 | 80 | 125 | 250 | 380 | V |
| Maximum DC blocking voltage | V_{DC} | 65 | 125 | 200 | 400 | 600 | V |
| Maximum peak working voltage | V_{RWM} | 90 | 180 | 300 | 600 | 800 | V |
| Maximum non-repetitive peak voltage | V_{RSM} | 100 | 200 | 350 | 600 | 1000 | V |
| Maximum repetitive peak forward surge current | I_{FRM} | 10 | | | | | A |
| Maximum average forward output current for free air operation at $T_A=45^\circ C$ R + L-load C-Load | $I_{F(AV)}$ | 1.2 1.0 | | | | | A |
| Peak forward surge current single sine wave on rated load (JEDEC Method) | I_{FSM} | 45 | | | | | A |
| Rating for fusing at $T_J=125^\circ C$ ($t < 8.3ms$) | I^2t | 10 | | | | | A ² sec |
| Minimum series resistor C-load at $V_{RMS} = \pm 10\%$ | R_t | 1.0 | 2.0 | 4.0 | 8.0 | 12 | Ω |
| Maximum load capacitance +50% -10% | C_L | 5000 | 2500 | 1000 | 500 | 200 | μF |
| Typical thermal resistance per leg ⁽¹⁾ | $R_{\theta JA}$ $R_{\theta JL}$ | 36 11 | | | | | $^\circ C/W$ |
| Operating junction temperature range | T_J | -40 to +125 | | | | | $^\circ C$ |
| Storage temperature range | T_{STG} | -40 to +150 | | | | | $^\circ C$ |

Electrical Characteristics Ratings at $25^\circ C$ ambient temperature unless otherwise specified.

| | | | |
|---|-------|-----|---------|
| Maximum instantaneous forward voltage drop per leg at 1.0A | V_F | 1.0 | V |
| Maximum reverse current at rated repetitive peak voltage per leg $T_A=25^\circ C$ | I_R | 10 | μA |

Notes:

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. at $0.375"$ (9.5mm) lead lengths with $0.2 \times 0.2"$ (5.5 x 5.5mm) copper pads

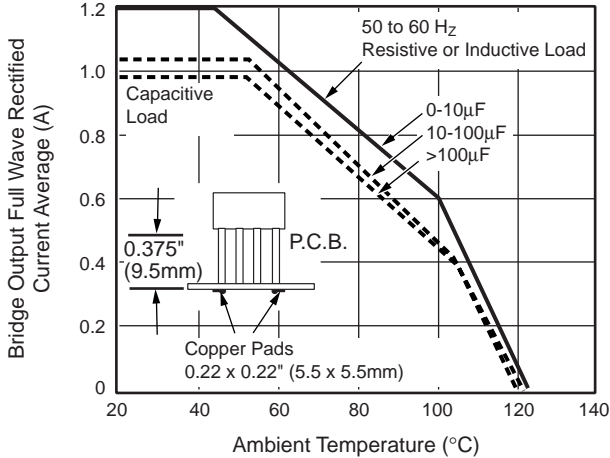
B40C1000G thru B380C1000G



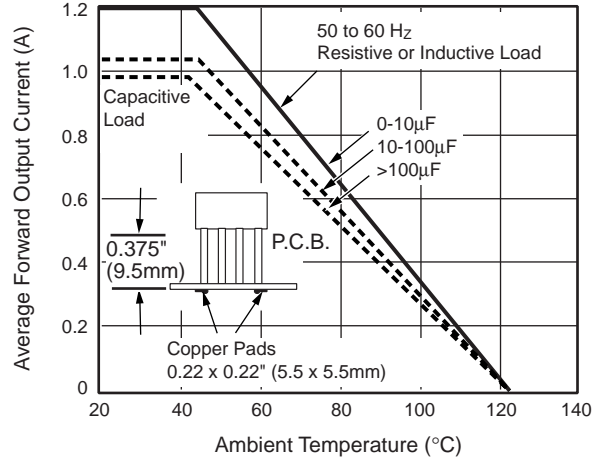
Vishay Semiconductors
formerly General Semiconductor

Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

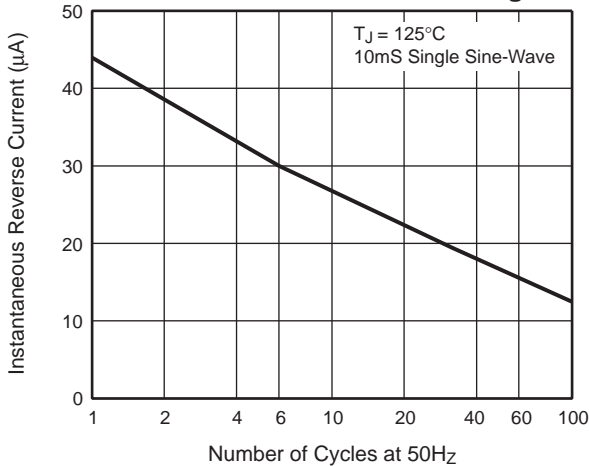
**Fig. 1 — Derating Curves
Output Rectified Current For
B40C1000G...B125C1000G**



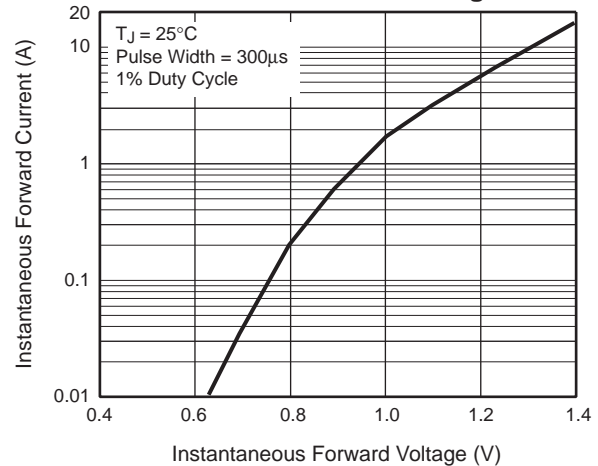
**Fig. 2 — Derating Curves
Output Rectified Current For
B250C41000G...B380C1000G**



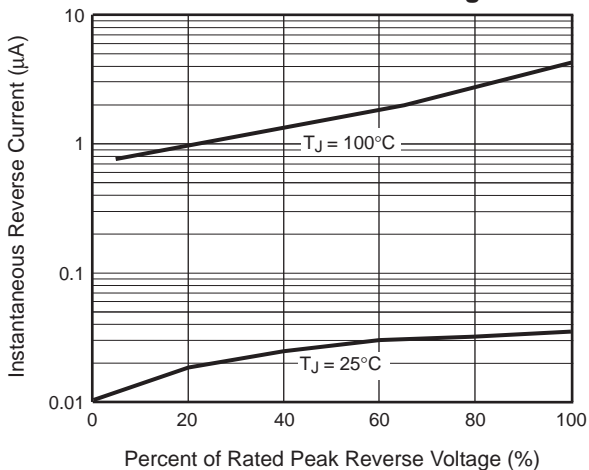
**Fig. 3 — Maximum Non-Repetitive
Peak Forward Current Per Leg**



**Fig. 4 — Typical Forward
Characteristics Per Leg**



**Fig. 5 — Typical Reverse
Characteristics Per Leg**



**Fig. 6 — Typical Junction Capacitance
Per Leg**

